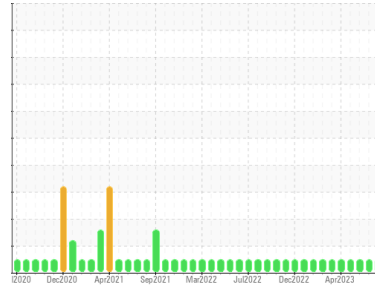




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

[10023300318]

Machine Id

**VESSEL 4 PUMP 2 (S/N B44044)**

Component

**Hydraulic System**

Fluid

**PETRO CANADA PURITY FG AW HYDRAULIC 46 (90 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0840982</b>	WC0833489	WC0820036
Sample Date	Client Info	<b>03 Aug 2023</b>	03 Jul 2023	29 May 2023
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>20	<b>0</b>	0
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0
Aluminum	ppm	ASTM D5185m	>20	<b>1</b>	1
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1
Copper	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0
Tin	ppm	ASTM D5185m	>20	<b>0</b>	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>0</b>	0
Barium	ppm	ASTM D5185m		<b>0</b>	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	0
Calcium	ppm	ASTM D5185m		<b>0</b>	0
Phosphorus	ppm	ASTM D5185m		<b>471</b>	478
Zinc	ppm	ASTM D5185m		<b>0</b>	0
Sulfur	ppm	ASTM D5185m		<b>573</b>	686

## CONTAMINANTS

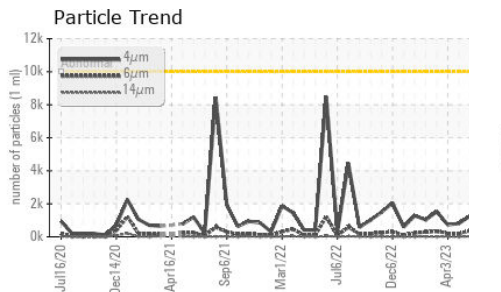
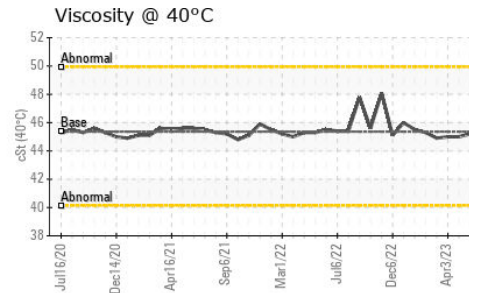
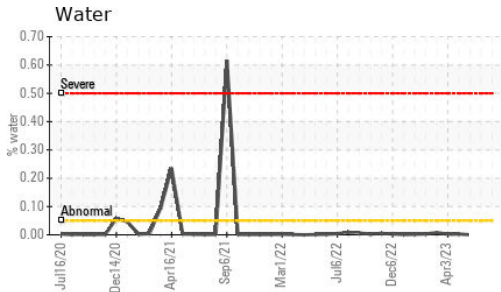
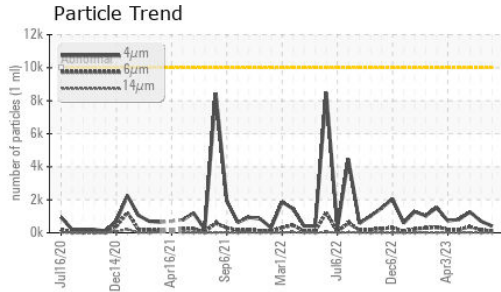
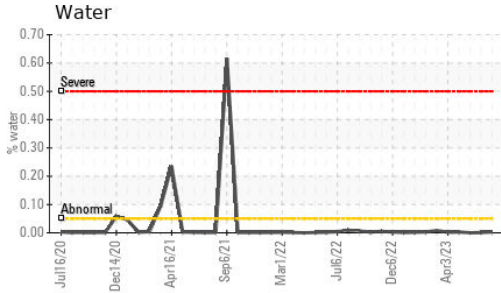
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	<b>2</b>	2
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1
Water	%	ASTM D6304	>0.05	<b>0.003</b>	0.001
ppm Water	ppm	ASTM D6304	>500	<b>33.0</b>	4.2

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>411</b>	699
Particles >6µm	ASTM D7647	>1300	<b>126</b>	167
Particles >14µm	ASTM D7647	>160	<b>16</b>	10
Particles >21µm	ASTM D7647	>40	<b>4</b>	3
Particles >38µm	ASTM D7647	>10	<b>0</b>	1
Particles >71µm	ASTM D7647	>3	<b>0</b>	0
Oil Cleanliness	ISO 4406 (c)	>20/17/14	<b>16/14/11</b>	17/15/10

## FLUID DEGRADATION

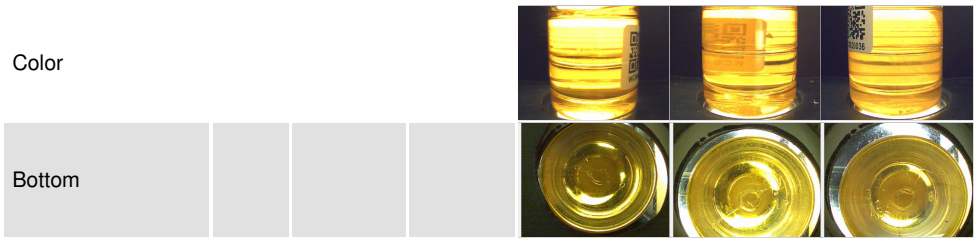
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.26	<b>0.20</b>



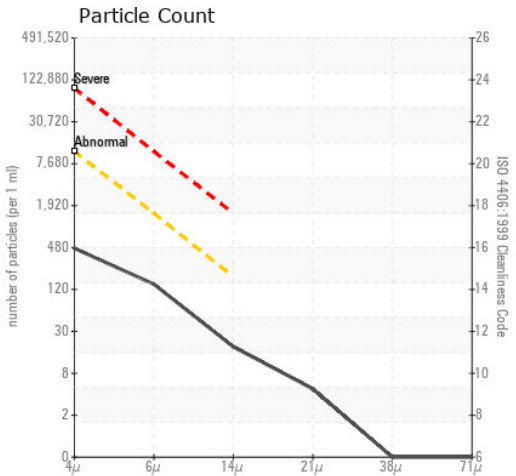
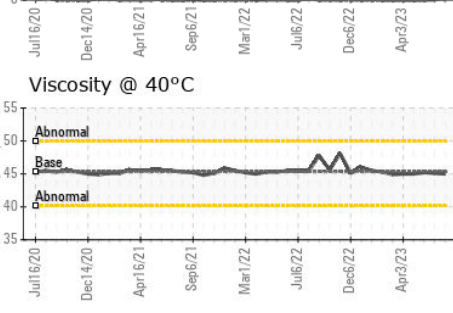
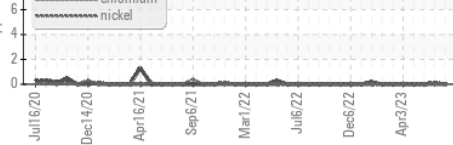
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45.36	45.0	45.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0840982 **Received** : 11 Aug 2023  
**Lab Number** : 05922211 **Diagnosed** : 14 Aug 2023  
**Unique Number** : 10602158 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: KF )

**OSCEOLA FOODS (HORMEL)**  
 1027 WARREN AVE  
 OSCEOLA, IA  
 US 50213  
 Contact: WADE MYERS  
 wlm Myers@hormel.com  
 T: (641)342-8043  
 F: (641)342-8047

Certificate L2367  
 To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)